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DATE MAILED: 06/17/2005

| APPLICATION NO.         | FILING DATE      | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO |
|-------------------------|------------------|----------------------|---------------------|-----------------|
| 10/019,063              | 12/27/2001       | Gerhard Niedermair   | 449122019600        | 1764            |
| 25227                   | 7590 06/17/2005  |                      | EXAMINER            |                 |
| MORRISON & FOERSTER LLP |                  |                      | ARMSTRONG, ANGELA A |                 |
| 1650 TYSON<br>SUITE 300 | IS BOULEVARD     |                      | ART UNIT            | PAPER NUMBER    |
|                         | MCLEAN, VA 22102 |                      | 2654                |                 |

Please find below and/or attached an Office communication concerning this application or proceeding.

|   | Application No.   | Applicant(s)                |  |  |  |  |
|---|---|-----------------------------|--|--|--|--|
| Office Action Summan  | 10/019,063  | NIEDERMAIR, GERHARD         |  |  |  |  |
| Office Action Summary   | Examiner  | Art Unit                    |  |  |  |  |
|   | Angela A. Armstrong   | 2654                        |  |  |  |  |
| The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply  |   |                             |  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). |   |                             |  |  |  |  |
| Status  |   |                             |  |  |  |  |
| 1) Responsive to communication(s) filed on  | Responsive to communication(s) filed on   |                             |  |  |  |  |
| 2a) ☐ This action is <b>FINAL</b> . 2b) ☐ This  | This action is <b>FINAL</b> . 2b)⊠ This action is non-final.  |                             |  |  |  |  |
|   | Since this application is in condition for allowance except for formal matters, prosecution as to the merits is |                             |  |  |  |  |
| closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.   |   |                             |  |  |  |  |
| Disposition of Claims   |   |                             |  |  |  |  |
| 4) Claim(s) is/are pending in the application.  |   |                             |  |  |  |  |
| 4a) Of the above claim(s) is/are withdrawn from consideration.  |   |                             |  |  |  |  |
| 5) Claim(s) is/are allowed.   |   |                             |  |  |  |  |
|   | Claim(s) is/are rejected.   |                             |  |  |  |  |
| <u> </u>  | ☐ Claim(s) is/are objected to. ☐ Claim(s) are subject to restriction and/or election requirement.               |                             |  |  |  |  |
| oj Claim(s) are subject to restriction and/or   | election requirement.   |                             |  |  |  |  |
| Application Papers  |   |                             |  |  |  |  |
| 9) The specification is objected to by the Examiner.  |   |                             |  |  |  |  |
| 10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.   |   |                             |  |  |  |  |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).   |   |                             |  |  |  |  |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.  |   |                             |  |  |  |  |
|   |   |                             |  |  |  |  |
| Priority under 35 U.S.C. § 119  |   |                             |  |  |  |  |
| <ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No.</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> </ul>  |   |                             |  |  |  |  |
| * See the attached detailed Office action for a list of the certified copies not received.  |   |                             |  |  |  |  |
|   | or the continued copies hist receive  | <b>u</b> .                  |  |  |  |  |
| Attachment(s)   |   |                             |  |  |  |  |
| 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 4)  | (PTO-413)<br>te             |  |  |  |  |
| 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date  |   | atent Application (PTO-152) |  |  |  |  |

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#### **DETAILED ACTION**

### **Drawings**

1. The drawings are objected to because elements illustrated in the Figure are not labeled or identified. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

# Claim Objections

2. Claims 1-5 are objected to because of the following informalities: as amended claim 1, reads "orthographic input into a phonetic transcription in a first conversion step" and as written, it is unclear to what applicant is referring to regarding "orthographic input into a phonetic transcription". Appropriate correction is required.

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### Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 3. Claims 1-4 and 6-9 are rejected under 35 U.S.C. 102(e) as being anticipated by Junqua et al (US Patent No. 6,684,185).
- 4. Regarding claim 1, Junqua discloses a method for speech processing in which an orthographic input is converted into a phonetic transcription in a first conversion step at col. 3, lines 38-57; checking and correcting the conversion result by the user at col. 5, lines 33-37 and Figure 1, "confirm word by display"; and a second step of converting from the phonetic transcription into a pseudo-orthographic representation and outputting in this representation at col. 4, lines 3-22 and 37-40.

Regarding claim 2, Junqua discloses a third step of converting an input performed in the psuedo-orthographic representation into the phonetic transcription at col. 4, line 62 continuing to col. 5, line 32.

Regarding claim 3, Junqua discloses conversion of phonetic word units into simple grapheme script units at col. 3, line 38 continuing to col. 4, line 37.

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Regarding claim 4, Junqua discloses conversion step executed by accessing a stored phoneme/grapheme assignment table at col. 7, lines 8-65.

Regarding claims 6-9, claims 6-9 are apparatus claims similar in scope and content to method claims 1-4 and therefore are rejected under similar rationale.

# Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

- (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Junqua in view of Molnar et al (US Patent 6,411,932).
- 6. Regarding claim 5, Junqua does not teach the implementation of a neural network as a machine-learning/self-learning technique for obtaining phonetic information. However, implementation of a neural network technique to acquire phonetic information was well known in the art. Molnar teaches a learner technique using a neural network to form pronunciation guesses for words in a training set and for finding a transformation rule that improves the guesses (Figure 15, col. 5, lines 4-21) and specifically teaches the system can produce good pronunciations or transcriptions for word not in a training set (col. 5, lines 43-50).

It would have been obvious to one of ordinary skill at the time of the invention to modify the system of Junqua to implement a neural network in the phonetic transcription system, as Art Unit: 2654

suggested by Molnar, for the purpose of producing transcriptions or pronunciations of new words or words not a part of the original vocabulary or grammar, as also suggested by Molnar.

## Response to Arguments

7. Applicant's arguments filed January 6, 2005 have been fully considered but they are not persuasive.

Applicant argues in the present invention, an orthographic input is converted into a phonetic transcription, and Junqua discloses a conversion of spelled words into a phonetic transcription. In response, the Examiner contends Junqua reads on the limitation of "orthographic input", since the input spelling of the letters is the same input sequence of letters that is written or typed, and thus Junqua provides adequate support for the limitation.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Angela A. Armstrong whose telephone number is 571-272-7598.

The examiner can normally be reached on Monday-Thursday 11:30-8:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richemond Dorvil can be reached on 571-272-7602. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Angela A Armstrong

Examiner Art Unit 2654

AAA June 12, 2005